HQB
headquartersbulletin
The NASA Headquarters News Source
October 2002

NASA to Resume Shuttle Flights and ISS Construction

The launch of the Space Shuttle *Atlantis*, delayed due to Hurricane Lilli, will resume shuttle flights for NASA after four months on the ground. After launch, STS-112 will begin its mission to the International Space Station (ISS) to continue the expansion of the vast orbiting outpost.

After repairing fuel line cracks on the shuttles, NASA gave the green light to STS-112 crew members: Commander Jeffrey Ashby, pilot Pamela Melroy and mission specialists Sandra Magnus, cosmonaut Fyodor Yurchikhin, Piers Sellers and David Wolf, a Mir veteran.

The primary goal of *Atlantis*' flight is to deliver and install the first starboard side outboard solar array truss segment, a massive 45-foot-long, 15-foot-wide component massing 28,776 pounds.

When completed, the station's nine-segment solar array truss will stretch 330 feet and carry two huge sets of solar panels on each end. Radiators inboard of the solar arrays will dissipate the heat generated by the station's electronic systems.

"I anticipate that there will be a lot of great moments," Ashby said in a NASA interview. "I think the two greatest things for me will be when we dock and first open the hatch and greet our friends that are there on board the space station. I know that's a very, very memorable moment. And, the second one that I know will be very special is when we undock and start to fly around and look back on the space station with S1 attached and realize that we've successfully completed our little part of the construction of space station."

Final preparations continued for the launch of STS-112. Atlantis is scheduled to launch no earlier than October 7, several days after the 17th anniversary of its maiden flight. Atlantis first flew October 3, 1985.

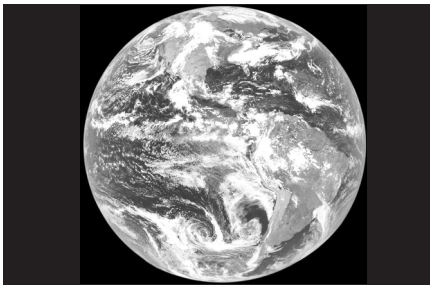
NASA originally planned to launch *Columbia* in July and *Atlantis* around Aug. 22, but during routine inspections on *Atlantis*, engineers discovered a small crack in a liner inside the hydrogen feed line leading to main engine No.1. Later, similar cracks were found throughout the entire shuttle fleet, at which point shuttle program manager Ronald Dittemore suspended shuttle flights. In August, Dittemore approved a plan to repair the cracks using a welding technique and to polish out tiny defects that could evolve into cracks over time.

After the spacewalks and payload transfers are complete, *Atlantis* will undock from the International Space Station, and begin its trip back to NASA's Kennedy Space Center, completing an 11-day mission spanning 170 orbits and 4.5 million miles.

inside:

Around the Centers . . .

Ames Research Center
NASA Ames will host the Global Nano Conference on Oct. 17–18, which will focus on the commercialization of nano- and biotechnology developments. NASA Ames' Commercial Technology Office and the Nano Special Interest Groups (NanoSIG) will cosponsor the event. Presentations will highlight research projects with commercial promise and several related topics. Dr. Meyya Meyyappan, Director of the Center for Nanotechnology at NASA Ames, will deliver the keynote address.



Dryden Flight Research Center
The Aircraft Cabin Turbulence Warning Experiment, jointly sponsored by NASA's Dryden Flight Research Center and the Federal Aviation Administration (FAA), will be conducted at the Civil Aerospace Medical Institute at Oklahoma City this month. The lack of a reliable turbulence warning has been one reason that commercial aircraft cabin crews have not been able to effectively prepare for turbulence encounters. The experiment should help develop a reliable estimate of time typically required to allow passengers to be seated, which will reduce the risk of injury during turbulence encounters.

Glenn Research Center
It was a very busy summer for Glenn employees performing community outreach activities. Glenn volunteers were on hand to answer questions at a variety of cultural events and heritage festivals where the Center provided exhibits. One of the Center's two floats was entered in a dozen community parades. Glenn had a strong presence at this year's Cleveland Air Show, as well as managing the Agency exhibit at the AirVenture 2002 air show.

Goddard Space Flight Center
On Oct. 3, the National Space Club will host its 21st annual Fall Reception at the Goddard Space Flight Center. The Space Club will recognize the contributions of NASA Earth Science spacecraft and the EOS Data Information System. This year's event also will honor the SeaWiFS Project, which was awarded the 2000 William T. Pecora Award.

Jet Propulsion Laboratory
Half of all Hispanics in the U.S. live in two states: California and Texas. Communicating the contributions of Hispanic astronauts, scientists and engineers is critical for recruiting and inspiring the next generation of explorers. To celebrate National Hispanic Heritage Month, JPL and JSC teamed up to create a bilingual video file and live-shot campaign highlighting the contributions and accomplishments of these role models. The message was that the voyage of discovery is a common thread that binds people of all ethnic backgrounds together.

Johnson Space Center
Johnson has received a prestigious award from the Texas Governor's Committee on People with Disabilities. The committee selected the Center to receive its Public Employer Award, which honors employers for recruiting, accommodating and advancing Texans with disabilities. Estella Gillette, Director of Equal Opportunity Programs at JSC, will accept the award at a ceremony in late October.

Kennedy Space Center
Kennedy Space Center has partnered with the U.S. Air Force 45th Space Wing and the Florida Space Authority to create a Cape Canaveral Spaceport 50-Year Master Plan. Two years in the making, the plan represents interagency cooperation among NASA, the U.S. Fish and Wildlife Service, the National Park Service and the U.S. Navy. The plan's vision embraces an integrated launch complex, supporting joint operations for NASA and the Air Force.

Langley Research Center
The Center is reaching out to stakeholders on the roadways and at entertainment venues. Langley's Business Development Office proposed and won approval for a specialized license plate that will carry the NASA logo, promoting the Agency and its presence in Virginia. Over 500 employees and retirees supported NASA and Langley Research Center by signing a petition endorsing the initiative. The bill, introduced in the Virginia General Assembly by Representative Marty Williams, will allow employees to support NASA even during their daily commutes.

Marshall Space Flight Center
A collaborative agreement between two NASA leaders in space transportation brings one step closer the next generation of space vehicles that will explore the solar system and beyond. The fourfold agreement addresses avionics, propulsion, independent rendezvous and docking of spacecraft and technologies that will reduce the risk of human and unpiloted space exploration.

Stennis Space Center
In October, the Education Offices at Stennis Space Center and Kennedy Space Center will sponsor a NASA's Administrator's Fellowship Program regional workshop at Alcorn State University in Lorman, Miss. Also, Stennis Space Center's Education Office will assist the newly established NASA Educator Resource Center (ERC) at Jackson State University in Jackson, Miss., by conducting a variety of workshops for early childhood educators.

Space Assets: Age Not an Issue

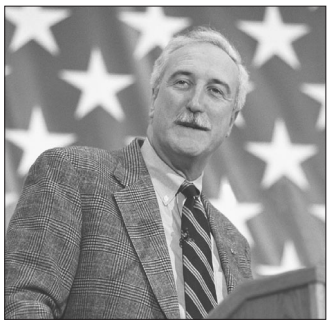


Photo credit: NASA/Renee Bouchard

The much anticipated launch of the Space Shuttle *Atlantis* (STS-112) will resume shuttle flights and construction of the International Space Station (ISS).

During routine inspections of the shuttle *Atlantis* on June 17, diligent engineers discovered a small crack in a liner inside the 12-inch-wide liquid hydrogen feed line leading to the main engine, and further inspections found similar problems on the entire fleet.

Media reports suggest the shuttle fleet and Crawler Transporters are becoming outdated and obsolete. That simply isn't true. *Atlantis* first flew in October 1985. Our oldest orbiter, *Columbia*, has been in service since 1981. When compared to the rest of the aeronautics and aerospace community, NASA's Space Shuttle fleet is relatively young.

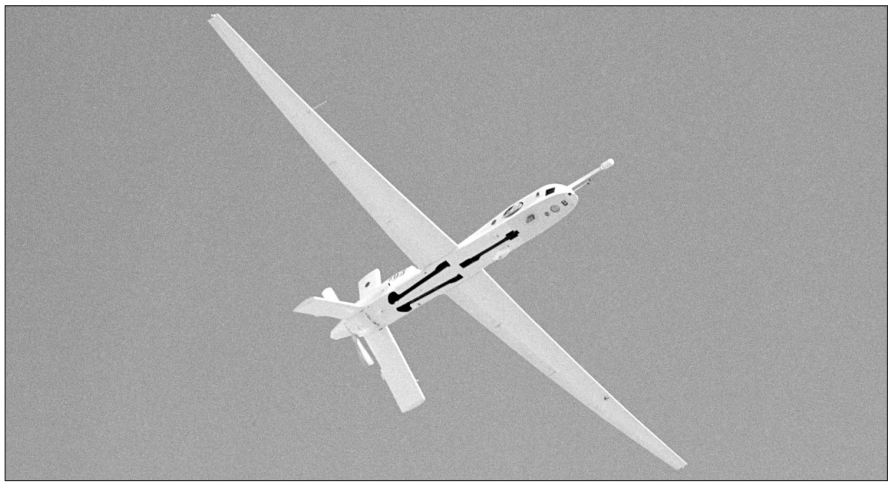
For example, the first B-52's were delivered to the Defense Department in the mid-1950s. With proper care, maintenance, and safety upgrades, many of those vintage aircraft are still in active military service and are being used today in the war on terrorism. Several of the jet fighters being used in combat today, as well as most of the commercial airplanes currently in service, were built in the 1970s.

The Space Shuttles are a valuable, low-mileage asset. With proper maintenance and continual safety upgrades, the fleet can safely fly for another two decades. The Crawler Transporters are the largest tracked vehicles in the world. While they have been around since the Apollo era, each crawler only has about 2,500 miles of use.

Safety is an essential element of NASA's vision and mission, and individuals can make a difference in ensuring the safety of our workforce and unique equipment. David Strait, the engineer who discovered the cracks on *Atlantis*, received praise and encouragement for performing his duties at the highest levels of efficiency and professionalism. David's commitment to excellence should be rewarded, applauded and used as an example for all NASA employees.

Finding and repairing the cracked Space Shuttle fuel liners and damaged bearings on the crawler are a testament to our commitment to safety and our desire to get it right. It's not about age; it's about attention to detail.

Lightning Study Uses Special Aircraft to Investigate Storms



The pilot and copilot anxiously watched the view from the cockpit window as the clouds over the Everglades darkened. The lightning detection instrument showed an increasing number of strikes. Tension in the cockpit mounted as the aircraft approached its fourth thunderstorm, but the pilots and support team were actually miles away, flying the aircraft remotely from a trailer at a military installation in Key West.

NASA researchers with the Altus Cumulus Electrification Study (ACES) used the Altus II remotely piloted aircraft to study thunderstorms in Florida. The Altus II can fly very high and very slowly, allowing researchers to obtain information about storms as never before.

Dr. Richard Blakeslee, a NASA atmospheric scientist at the Global Hydrology and Climate Center in Huntsville, Ala., said, "We were fortunate to have a front-row seat to this meteorological event. With cloud tops at 50,000 feet, it would have been nearly impossible to study this storm without the technology we have today."

For more information about the ACES study, see **aces.msfc.nasa.gov**

The Freedom to Manage Task Force Is on a Mission

In an effort to open lines of communication and provide feedback on Freedom To Manage (F2M) activities, the Freedom To Manage Task Force held a Town Hall Meeting at Headquarters on Sept. 24. Courtney Stadd and Greg Reck, Co-Chairs of the F2M Task Force, hosted the event, the second in a series of Town Hall Meetings at NASA facilities.

Discussion included a status report on what has been accomplished to date in terms of responding to inputs received from NASA employees. The Task Force members are evaluating each submission as a potential idea to help NASA reduce bureaucratic obstacles. Currently 350 potential barriers and impediments have been identified.

Greg Reck said, "Several inputs require changes internal to NASA, various ideas require negotiation with an external agency, while some require legislation." Tiger Teams will address such "spinoff" issues that fall outside the scope of the F2M charter. The President's Management Agenda enables the Freedom To Manage Task Force to identify and stimulate changes to create effective management.

Joining F2M Co-Chairs Stadd and Reck at the Headquarters Town Hall Meeting were the five principal task force members who are addressing inputs submitted by NASA employees: Greg Hayes, Director of Human Resources, JSC; Anne Guenther, Director of the Analysis Division, HQ Office of Procurement; Richard Beck, Director of the Resource Analysis Division, HQ CFO Office, Ken Ledbetter, Executive Director of Programs, HQ Office of Space Science; and Jeff Sutton, Assistant Administrator for Management Systems at HQ. The following is a list of completed actions in various categories:

- **Human Resources**
  Eliminated academic initiative reporting requirements
- **Procurement**
  Speed the Administrator's Notice of Significant Contract Action (ANOSCA) Process
- **Financial Management**
  Consolidated budget process with annual schedule and established 100 percent funds allocated when Congress agrees on Operation Plan
- **Other**
  Reduced cycletime for coordinating NASA Directives

Photo credit: NASA/Bill Ingalls

Cynthia Washington, Headquarters Directives Manager, Office of Management Systems, developed an F2M Guidance and documents library on the NODIS Web site so that employees could stay abreast of policy and procedures changes that result from F2M nodis3.gsfc.nasa.gov/library/main_lib.html

Greg Reck, Co-Chair of the F2M Task Force, at the HQ Town Hall Meeting.

Photo credit: NASA/Renee Bouchard

F2M Co-Chairs Courtney Stadd and Gregory Reck share the stage at the Headquarters Town Meeting with the five principals that are acting on the inputs submitted by NASA employees: Greg Hayes, Director of Human Resources, JSC; Anne Guenther, Director of the Analysis Division, HQ Office of Procurement; Jeff Sutton, Assistant Administrator for Management Systems at HQ; and Richard Beck, Director of the Resource Analysis Division, HQ CFO Office.

Photo credit: NASA/Renee Bouchard

Anne Guenther, Director of the Analysis Division and Principal Lead for the F2M Procurement Category, comments on the customer satisfaction issue regarding the ODIN contract.

Employees at the Town Hall meeting discussed issues of telecommuting, flexibility in work schedules and customer satisfaction with the ODIN contract. Ruth Netting, Program Policy Analyst from the Office of Space Science, found the Town Meeting to be refreshing and appreciated the feedback.

Stadd emphasized that F2M is still in its first phase. Stadd encouraged employees to go to the F2M Web site and submit suggestions, or contact their Code's F2M representative for assistance. F2M is not just about removing barriers to management, but also removing barriers to performance. It affects everyone. Get involved.

The Task Force is facing a daunting task during the next few months to implement pending suggestions:

- Legislative support for Human Resources Industry Exchange Programs;
- Procurement customer service issues;
- Legislative impact for proposed working capital fund; and
- Reevaluation of ISO 9001 Certification requirements.

For more information on F2M, visit www.f2m.nasa.gov

> F2M is not just about removing barriers to management, but also removing barriers to performance. It affects everyone. Get involved.

Hubble Discovers Black Holes in Unexpected Places

Medium-size black holes do exist, according to the latest findings from NASA's Hubble Space Telescope, but scientists had to look in some unexpected places to find them.

The previously undiscovered black holes provide an important link that sheds light on the way in which black holes grow. Even more odd, these new black holes were found in unexpected places—the cores of glittering, "beehive" swarms of stars, called globular star clusters, that orbit our Milky Way and other galaxies.

The new findings promise a better understanding of how galaxies and globular clusters first formed billions of years ago. Globular star clusters contain the oldest stars in the universe. If globulars have black holes now, then globulars most likely had black holes when they formed billions of years ago.

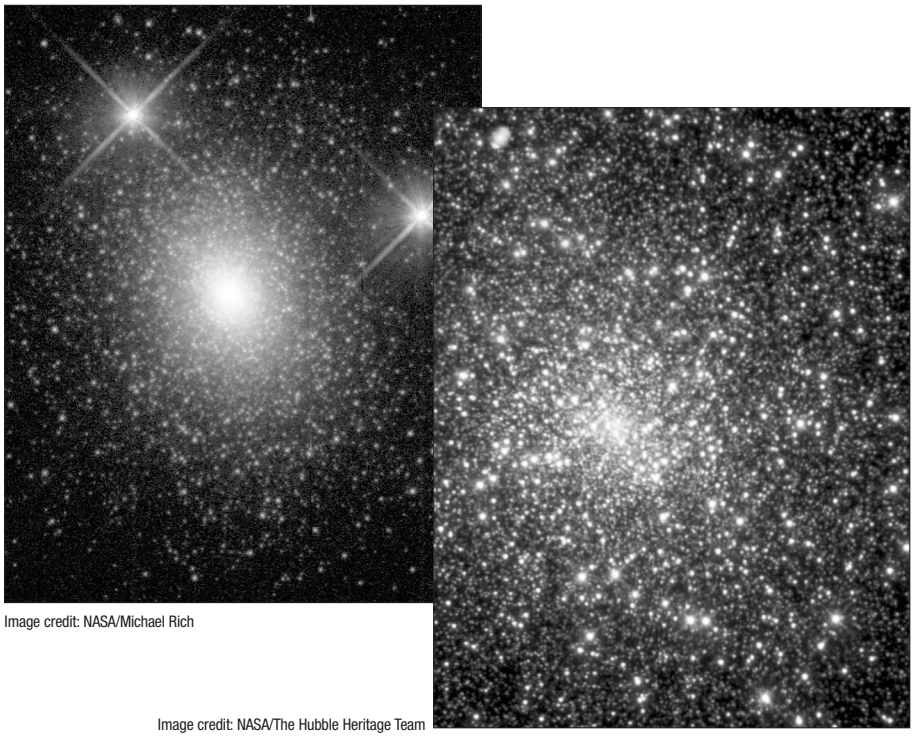


Image credit: NASA/Michael Rich

Image credit: NASA/The Hubble Heritage Team

SFA Program: We Have Friends in High Places

It was only 40 years ago that Americans first ventured into space, only 30 years ago that people first walked on the moon, only 20 years ago that our nation celebrated the first Space Shuttle launch, and only 2 years ago that the partnership of the International Space Station began its permanent crew habitation. In less than half a century, we have progressed from spending only minutes in space to spending months.

Although NASA has made quantum leaps technologically, some things have not changed. Our commitment to quality work and flight safety remains of paramount importance. The business of putting people into space has inherent risk. It is up to each of us to be perpetually vigilant.

It is critically important that we continue to focus on safety for the lives of the astronauts, for mission success and for the success of the nation's space program and those of other spacefaring nations. It is equally important that the entire workforce understand that safety is an essential and integral part of ensuring success.

The Space Flight Awareness Program invites you to share the vision of its 2002 safety campaign, "We Have Friends in High Places." The goal is to revitalize everyone's personal commitment to safety. Your support and endorsement throughout the coming year are key elements to the success of this campaign. Beginning in October 2002, please include the SFA safety message as part of your communications when you hold team, all-employee, and site meetings. Your SFA Program Administrator can give you details of the campaign. NASA will continue to explore ways to affirm the SFA message that safety is everyone's responsibility.

Photo credit: NASA/Renee Bouchard

Bryan O'Connor and William Readdy, the Associate Administrators for Codes Q and M, are working together to revitalize the commitment to safety.

NASA Explores Future Collaborations With Hollywood

"Space the final frontier…" perhaps the most famous and widely recognized words ever spoken by a television character, James T. Kirk, of the starship Enterprise. Hollywood has been fascinated by space from the earliest days of movie and television production. Producers and writers have been influenced and motivated by both science and science fiction.

In an effort to interest and inspire youth across America, NASA sponsored a symposium for Hollywood producers and writers at NASA's Jet Propulsion Laboratory (JPL) in Pasadena, last month. Sponsored by NASA Public Affairs, astronauts, scientists, and aerospace engineers previewed the future of space exploration, research and aeronautic advances for some of the best creative minds in Hollywood. NASA would like to inspire more movies and television shows about space, science and technology. Our goal is to educate, inspire and create interest across America and the world in space exploration and the technology that supports scientific advances.

"We have the opportunity to build on what has been a historically successful outreach effort. NASA has a unique and exciting story to tell," said Glenn Mahone, Assistant Administrator for Public Affairs and Master of Ceremonies for the symposium. "At NASA, we dream big, and the film industry's writers and producers capture many of those dreams on film. This is a chance for fantasy and reality to come together."

The symposium speakers included Dr. Charles Elachi, Director of the NASA Jet Propulsion Laboratory, Glenn Mahone, Assistant Administrator for Public Affairs, Dr. Ed Weiler, Associate Administrator for Space Science, Dr. Jeff Hoffman, Professor of Aeronautics and Astronautics at MIT, Dr. Neal Pellis, International Space Station Program Scientist, Dr. Randall Friedl, Chief Scientist for Earth Science and Technology Directorate and Dr. Robert Pearce, Director of the Strategy and Analysis Division in the Office of Aerospace Technology.

Producer Robert Shapiro, under contract to NASA, was the creative consultant for the symposium. NASA began working with Shapiro after he watched a Space Shuttle launch.

Event attendees included Bill Borden, producer of the Arnold Schwarzenegger film *End of Days*, and writing partners Jon Cryer and Richard Schenkman, who are researching and writing a script for a movie that is set during the space race of the 1960s.

"I was, in fact, a nerd as a child and the space program captured my imagination like nothing else," said Cryer, known for his role in hit film *Pretty in Pink*.

NASA wants to help inspire the next generation to keep looking ahead and outward; to inspire future generations to continue to go where no one has gone before…

NASA and Portugal Agree to Environmental Studies

NASA and the Portuguese Ministry of Environment have agreed to study ways to mutually prevent environmental pollution.

U.S. Ambassador to Portugal John N. Palmer on behalf of NASA and Dr. Isaltino Morias, Portuguese Minister of Environment, signed a joint statement regarding Cooperation in the Field of Environmental Pollution Prevention, in Lisbon, Portugal, on Sept. 18, 2002. In addition, Olga Dominguez, Director, Environmental Management Division, Office of Management Systems, NASA, and Pelagio Castello Branco, Director General, Centro Para Prevencao de Poluicao, signed a Terms of Reference that establishes a process to facilitate cooperative activities in support of the Joint Statement.

The Joint Statement and Terms of Reference create a process for establishing cooperative activities between NASA and the Portuguese Ministry of Environment in the area of environmental pollution prevention. NASA and the Ministry of Environment will meet annually for the next three years to identify potential cooperative projects of benefit to both countries.

PROFILE: Lynn Cline

Photo credit: NASA/Bill Ingalls

Your title: Deputy Assistant Administrator for External Relations.
Describe your current position: As Deputy, I am responsible for international and interagency activities, as well as oversight of other office functions, such as advisory committees, the History Office, and administrative matters (personnel, budget, etc.). I am currently involved in the ongoing space policy review led by the National Security Council, and I represent the U.S. Government at the UN Committee on the Peaceful Uses of Outer Space.
Brief career history: I started at NASA in September 1975 as a cooperative education student from East Carolina University. After two co-op assignments with university work in between, I converted to a civil service position in 1976. My entire NASA career has been at NASA Headquarters in various versions of our office, through reorganizations, mainly with a focus on international relations. I led negotiating teams for many agreements, most notably with the European Space Agency for the Cassini mission and with Canada, Europe, Japan and Russia for the International Space Station agreements signed in 1998.
Activities/hobbies: I love to read, dance and garden.
Describe your family: I am married to Ken Cline, and we just celebrated our 21st anniversary.
NASA career highlight: Receiving the International Cooperation Award from the American Institute of Aeronautics and Astronautics in 1998. I was nominated by my peers, including foreign partners, and when the award was announced, I received positive feedback and congratulations from colleagues at NASA and around the world, and from three former bosses!

NASA Remembers September 11

Photo credit: NASA/Bill Ingalls

On behalf of New York City, Astronaut Mike Massimino presented Administrator Sean O'Keefe with a flag given to NASA by Mayor Michael Bloomberg in appreciation of NASA's efforts after the September 11 attacks.

Administrator Sean O'Keefe and Astronaut Mike Massimino led a special commemoration event honoring the memory of the victims and heroes of the September 11 terrorist attacks and paying tribute to the brave people who continue to fight for freedom.

Bishop Charles A. Lewis led the NASA family in a prayer, following the presentation of the Colors. NASA employees then observed a moment of silence to honor and remember the fallen and the heroes from the attacks. Administrator Sean O'Keefe gave remarks and introduced a video about NASA's efforts to help heal the nation.

The White House asked all Americans to respond to the anniversary of the terrorist attacks with acts of good and to engage in volunteer services as a way to honor the victims and fallen heroes of the war on terrorism.

Design It and They Will Come

NASA officials, Congressional representatives, aerospace industry executives and other dignitaries got a peek into the possible future in spacewear when they recently attended a demonstration of a new and improved spacesuit for astronauts to conduct spacewalks.

While existing NASA EVA suits fully address current needs for building, operating and maintaining the ISS, NASA is taking a proactive approach in investing in technology needed for future space flight activities.

On Sept. 19, ILC, Dover, Del., the company that has been the sole maker of NASA spacesuits for spacewalks since the Apollo Program, unveiled a multi-use spacesuit that addresses deficiencies encountered with NASA's own small suit design.

The suit is radically different from the company's former suits in that it provides more capability and mobility for all astronauts, no matter what size they may be. The suit also provides improved protection from radiation, more comfort and increased safety and productivity.

The demonstration was part of an R&D effort designed to increase the understanding of the suit's capabilities.

Whitson Named NASA's First ISS Science Officer

NASA Administrator Sean O'Keefe named Dr. Peggy Whitson the first NASA ISS Science Officer on Monday, Sept. 16. "Dr. Peggy Whitson is an obvious choice for NASA's first ISS Science Officer," said Administrator O'Keefe. "In addition to a doctorate in biochemistry, she is the recipient of numerous awards and fellowships."

The NASA ISS Science Officer is a new duty assignment that will be made for a NASA astronaut on each ISS Expedition Crew. For now, the Science Officer will focus on U.S. research conducted aboard ISS. NASA will explore, with its 15 international partners, the potential to expand the Science Officer role as the station's research capabilities are increased.

NASA Academy Honors

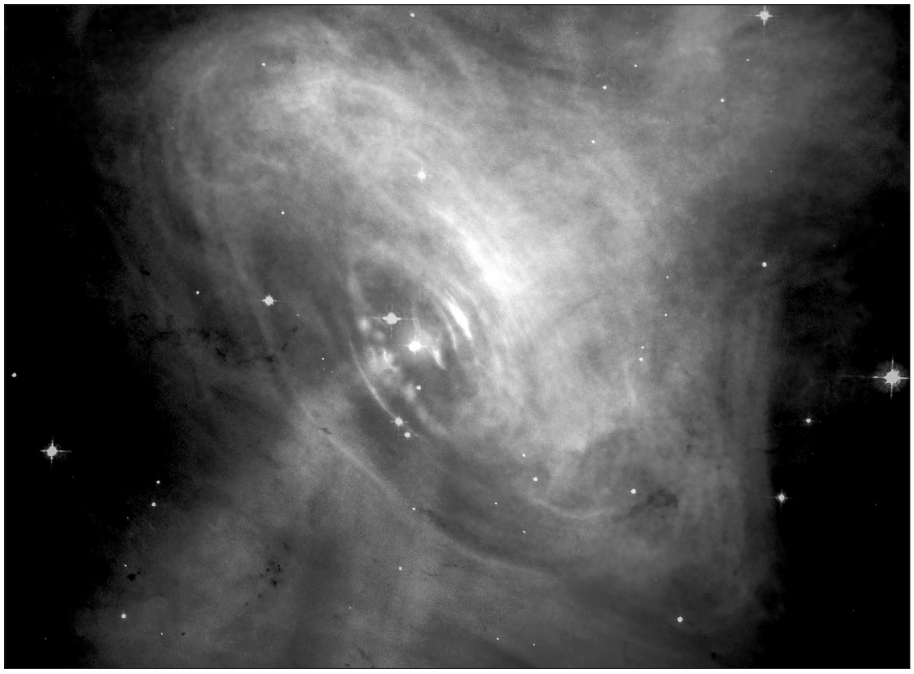
The NASA Academy has just concluded its Project Management Shared Experience Program (PMSEP), that ran from Sept. 9 through 13 at the Hyatt Fair Lakes Hotel in Fairfax, Va.

Eight Best Projects were honored during the PMSEP. Shown above is Orlando Figueroa, Mars Program Director, Office of Space Science, presenting a plaque containing pictures of all of the Best Projects and specifically honoring the IMAGE Project to Frank Volpe, IMAGE Project Manager. Pictures of the other presentations and a more complete writeup of the conference can be found on the NASA Academy Web site **www.appl.nasa.gov**

Space Movie Reveals Shocking Secrets of the Crab Pulsar

Just when it seemed like the summer movie season had ended, two of NASA's Great Observatories have produced their own action movie. Multiple observations made with NASA's Chandra X-ray Observatory and the Hubble Space Telescope captured the spectacle of matter and antimatter propelled to near the speed of light by the Crab pulsar, a rapidly rotating neutron star the size of Manhattan. These observations were the subject of a Space Science Update at NASA Headquarters on Sept. 19.

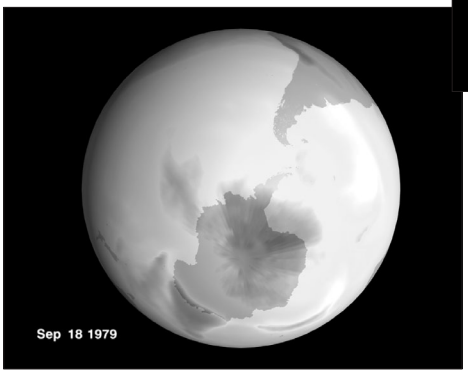
The Crab was first observed by Chinese astronomers in 1054 A.D., and it has since become one of the most studied objects in the night sky. By combining the power of both Chandra and Hubble, the movie reveals features never seen in still images. By understanding the Crab, astronomers hope to unlock the secrets of how similar objects across the universe are powered.

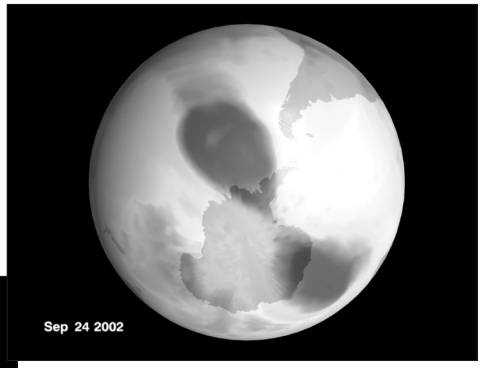


Images and additional information are available at: **chandra.harvard.edu**

Unusually Small Ozone Hole This Year

Scientists from NASA and the Commerce Department's National Oceanic and Atmospheric Administration (NOAA) have confirmed the ozone hole over the Antarctic this September is not only much smaller than it was in 2000 and 2001, but has split into two separate "holes."





The researchers stressed the smaller hole is due to this year's peculiar stratospheric weather patterns and that a single year's unusual pattern does not make a long-term trend. Moreover, they said, the data are not conclusive that the ozone layer is recovering.

Paul Newman, a lead ozone researcher at NASA's Goddard Space Flight Center, Greenbelt, Md., said this year, warmer-than-normal temperatures around the edge of the polar vortex that forms annually in the stratosphere over Antarctica are responsible for the smaller ozone loss.

The stratosphere is a portion of the atmosphere about 6-to-30 miles above the Earth's surface where the ozone layer is found. The ozone layer prevents the sun's harmful ultraviolet radiation from reaching the Earth's surface. Ultraviolet radiation is a primary cause of skin cancer. Without protective upper-level ozone, there would be no life on Earth.

In 2001, the Antarctic ozone hole was larger than the combined area of the United States, Canada and Mexico. The last time the ozone hole was this small was in 1988, and that was also due to warm atmospheric temperatures.

NOAA and NASA continuously observe Antarctic ozone with a combination of ground, balloon and satellite-based instruments.

NASA Honors Outstanding Minority Contractors

NASA has named QSS Group, Inc., as its Minority Contractor of the Year; GB Tech, Inc., as its Minority Subcontractor of the Year; and TechTrans International, Inc., as its Women Owned Business of the Year. The three firms were honored at the Agency's annual Minority Business and Advocates Awards ceremony on Sept. 24, at NASA Headquarters in Washington.

NASA Administrator Sean O'Keefe presented the awards and described NASA's interaction with small business during the ceremony. The Minority Business and Advocates Awards ceremony was held in conjunction with Minority Enterprise Development Week.

QSS is a prime contractor at NASA's Ames Research Center. The company provides a broad range of research and development for the Computational Science Division in artificial intelligence, knowledge-based systems, autonomy and robotics and neuro-engineering and flight control.

GB Tech, Inc., of Houston, is a strategic partner with the Boeing Company on the International Space Station program, providing safety, reliability and hardware quality assurance, as well as software development integration laboratory operational support.

TechTrans International, Inc., also headquartered in Houston, is a prime contractor to NASA's Johnson Space Center. TechTrans supports the U.S.-Russian space programs, providing translation, interpretation, language training and logistics support services.

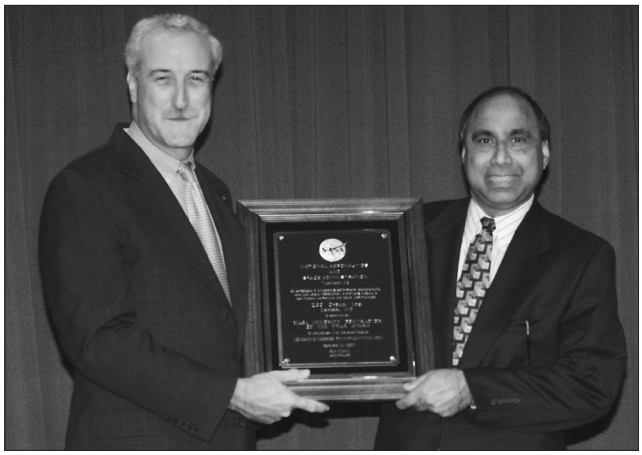


Photo credit: NASA/Renee Bouchard

NASA Administrator Sean O'Keefe presents NASA's Minority Contractor of the Year award to Frank Islam, President of QSS Group, Inc., Lanham, Md.

Five NASA Field Centers were recognized for meeting or exceeding all negotiated socioeconomic business goals for Fiscal Year 2001, and outstanding advocates were also recognized for their contributions and innovative approaches to working with minority and women owned businesses.

For more information and a full list of winners, visit the NASA Office of Small and Disadvantaged Business Web site at: **www.hq.nasa.gov/office/codek**

WIA 2002 Award Winners

WIA President Michelle Robbins with photo of the late Pam Mountjoy and 2002 Award Winners: Brigadier General Kathy Thomas, USAF; Dr. Supriya B. Ganguli, Corporate Vice President, SAIC; Charla K. Wise, Vice President Engineering, Lockheed Martin Aeronautics Company; Patricia Palazzolo, Upper St. Clair High School; Colonel Susan Helms, USAF, NASA Astronaut.

Women in Aerospace (WIA), a nonprofit organization dedicated to promoting the advancement of women in aerospace, presented its 2002 awards before an audience of over 120 aerospace, defense and government professionals at a Capitol Hill ceremony on Tuesday night, Sept. 17, 2002. The evening included a special presentation in honor of the late Pamela Mountjoy, an education specialist with NASA Headquarters, and Colonel Susan Helms, USAF, Chief, Space Control Division, Headquarters Air Force Space Command, Peterson AFB, Colorado. Colonel Helms flew on STS-101 in Atlantis to deliver and repair critical hardware for the International Space Station and even conducted a Take Your Daughter to Work webcast from space.

Hats Off to NASA!!!

Dr. Dorothy I. Height, Chair and President Emerita of the National Council of Negro Women (NCNW), pictured in the center, replaces her hat with a NASA cap to represent NCNW's commitment in partnering with NASA to inspire the next generation of scientists, engineers and explorers during the 17th Annual Black Family Reunion Celebration.

Also pictured are Cheryl Cooper, Executive Director, NCNW (left) and Astronaut Joan Higginbotham, NASA's next African American female scheduled to fly in space (right). Higginbotham is scheduled to fly on the Space Shuttle in the fall of 2003.

obituary

Pamela L. Mountjoy, 49, died on Sept. 12 at her home in Laurel, Md., after a long, valiant struggle with cancer. A long-time educational specialist with the Education Division, Office of Human Resources and Education, Pam was known at Headquarters for having the most interesting collection of space-related toys and memorabilia that could be contained in one cubicle.

A former elementary school teacher, Pam came to NASA in 1985 to manage the educator component of the Teacher in Space Program. Some accomplishments include a wide variety of educational products and distribution networks; serving as the Education liaison with the Human Exploration and Development of Space Enterprise, working with Codes M and U on their education activities; managing NASA's Teaching From Space Program, developing activities to be used on board the Shuttle and ISS, as well as complementary programs for students and educators "on the ground."

Her many honors include the NASA Exceptional Service Medal, the Silver Snoopy, the Women in Aerospace Emeritus Award and NASA's Distinguished Service Medal. Pam leaves behind a host of friends and colleagues who miss her greatly. For information about ways to memorialize Pam's many contributions, please contact Sherri McGee via e-mail at amcgee@hq.nasa.gov

retirements

Shirley Carroll, a legal secretary for the Deputy General Counsel in the Office of the General Counsel, retired from NASA on Sept. 2 after 19 years. During her career, she also worked at the Census Bureau and the law firm of Fleit, Jacobson, Cohn and Price. Proud to be part of the NASA family, she thanks her coworkers for the wonderful memories and plans to stay in touch.

Margaret L. Cretin, a Program Assistant in the Education Division, retired from NASA in July after a Government career which included 17 years at HQ and 3 years at the Department of State. Margaret has left the DC area to live in Columbus, Ohio, and plans to do volunteer work at her daughter's high school and a science center and with theater groups.

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The *HQ Bulletin* is produced by InfoCom of the HQ Information Technology and Communications Division in cooperation with the Office of Public Affairs.

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***HQ Bulletin* Submission Deadline**
Articles must be submitted by close of business Tuesday, October 15, to be considered for the November 2002, edition of the *HQ Bulletin*. For the publication schedule, see www.hq.nasa.gov/hq/infocom/bullsched.htm